

Notice of Allowability

Application No.

10/644,829

Examiner

Eric Woods

Applicant(s)

SATOH, KIYOHIDE

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Interview 10/18/2006.
2. ☒ The allowed claim(s) is/are 1,3,5,7-12,17,19,24 and 26.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Arguments

Applicant's arguments, see Remarks pages 1-4 and claim amendments, filed 8/30/2006, with respect to the rejection(s) of claim(s) 1, 3, 5, 7-12, 17, 19-20, 24, and 26-28 under various statutes have been fully considered and are persuasive.

Therefore, the rejection of claims 1, 3, 5, 7-12, 17, 19-20, 24, and 26-28 under 35 USC 103(a) has been withdrawn in view of applicant's amendments.

The rejection of claims 27-28 under 35 USC 101 stands withdrawn in view of applicant's amendments.

The rejection of claims 24 and 26-28 under 35 USC 112, first paragraph, stand withdrawn in view of applicant's amendments.

The rejection of claims 1, 3, 5, 7-12, 17, 19-20, 24, and 26-28 under 35 USC 112, first paragraph as not being enabled stand withdrawn in view of applicant's amendments of the claims to recite the meanings intended by the specification concerning the relationship of the image pick-up device and the measurement object.

Definitions

Note that the term 'index' in the claims below was defined in the instant specification (and in the PGPub for the instant application, US 2004/0090444) in the following statement:

[0051] The corrected value operation process is basically performed on the basis of the observation prediction position of the landmark on the image predicted from the sensor output and the observation position on the image of the landmark actually detected by the image processing, employing a landmark (e.g., a real object (or a part) that can use the features of an image

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for its projected image as an **index** of alignment such as the corner of the building or the roof of the house). Accordingly, it is the maximal point of the corrected value operation process how to detect the observation position of landmark from the image correctly and stably.

Thusly, the term 'index' in reality means 'index of alignment' which further means a portion or segment of the base image that is to be used for template matching (e.g. the corner of a house).

The term 'roll angle' is never used in the specification. However, the 'roll direction' is referred to in the specification, where the image is rotated through a rotational angle to correct it. It is assumed that the discussion in 4:20-5:2 of the instant specification is the controlling definition.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The combined elements, particularly of the orientation sensor, the prediction position unit for indices within the target image, and rotating unit that rotates the extracted images and locates indices in the rotated picked up unit via template matching are simply not found together in the prior art at the time the invention was made. Furthermore, the combination of some of these elements would not be suggested by the prior art of record, at least not to use the indices to correct the image (versus the orientation sensor and like), and using template matching after the rotation.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brian Klock (36,570) on 10/18/2006.

In the claims:

In claim 1, line 8, replace **—valve—**with **"value"**

Cancel claim 20.

Cancel claim 27.

Cancel claim 28.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Woods whose telephone number is 571-272-7775.

The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Woods

October 17, 2006


ULKA CHAUHAN
SENIOR PATENT EXAMINER